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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/438,652	11/12/1999	NOBUO SASAKI	SCEI-16.677	9667

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EXAMINER

GOOD JOHNSON, MOTILEWA

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 07/02/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/438,652

**Applicant(s)**SASAKI ET AL. **Examiner**

Motilewa A. Good-Johnson

**Art Unit**

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the following communications: application, filed on 11/12/1999; IDS, paper #4, filed on 06/06/2000; IDS, paper #5, filed on 08/21/2000; Amendment A, filed 04/17/2003.

**This action is made final.**

2. Claims 1-11 are pending in this application. Claims 1 and 6 are independent claims. Claims 1-10 have been amended. Claim 11 has been added.
3. The present title of this application is "Image Generation Method and Image Generation Device" (as originally filed).

### ***Claim Objections***

4. Claim 1 is objected to because of the following informalities: line 4, "comprising the of" should be either comprising: or comprising the step of:. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-11 rejected under 35 U.S.C. 102(a) as being anticipated by Barad et al., *Real-Time Procedural Texturing Techniques Using MMX*, GamaNetwork, May 1, 1998, (numbered by Examiner pages 1-20).

As per independent claim 1, an image generation method for generating a two-dimensional image by texture mapping to three-dimensional polygons including textures to be mapped to generate an overall pattern on a polygon, and modulation textures, comprising the of: multiplying a texture by a modulation texture. (Barad discloses an original texture, figure 3.1 scaled by an amplitude modification factor and added together, page 3, to create a final image texture, i.e. multiplication)

With respect to dependent claim 2, wherein in said multiplying step an amplitude is made smaller with increasing distance from the vicinity of a viewpoint. (Barad discloses the amplitude modification factor of smaller factors, page 3, and further discloses the noise function is assigned to each location in space, page 2)

With respect to dependent claim 3, repetition period of textures and a repetition period of modulation textures are offset from each other. (Barad discloses Perlin's noise and iterations of applying the noise as octaves, i.e. period, and the number of octaves as generated by the octave equation, page 2)

With respect to dependent claim 4, modulation texture is set to higher spatial frequencies than those of said texture, with color information removed from said texture. (Barad discloses calculating a wood texture with different shade of brown and black

modeled by an equation and using a random offset, turbulence value, to calculate the final color, pages 3-4)

With respect to dependent claim 5, modulation texture consists of different patterns from said texture. (Barad discloses using scaled amplitude modification factors to generate scaled noise functions, page 2)

As per independent claim 6, an image generation device for generating a two-dimensional image by texture mapping . . . comprising: a memory means that stores textures to be mapped to generate an overall pattern . . . (Barad discloses in the marble texturing algorithm inputting an initial texture into a texture map, page 7) modulation textures used to amplitude-modulate the patterns generated by mapping of the textures; (Barad discloses for each image, scaling the amplitude by varying amounts and varying the magnification of the scene for each image and summing the images together, page 2) and a multiplying means multiplying a texture by a modulation texture. (Barad discloses in the marble texturing algorithm multiplication of the alignPixNum by the turbulence, page 7)

With respect to dependent claims 7-10, they are rejected based upon similar rationale as above dependent claims 2-5.

With respect to dependent claim 11, a pixel value of a modulation texture represents the intensity for multiplying to the pixel value of an image drawn using said texture. (Barad discloses a pixel table for storing and calculating the DDU values, page 10)

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is

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(703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Motilewa A. Good-Johnson  
Examiner  
Art Unit 2672

mgj  
June 18, 2003

  
JEFFERY BRIER  
PRIMARY EXAMINER